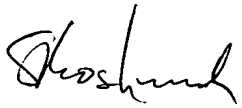
REMARKS

Claims 1-20 are active in the present application. Claims 3, 7-8 and 10-11 have been amended to remove multiple dependencies. Claims 13-20 are new claims. Support for the new claims is found in the original claims. No new matter is added. An action on the merits and allowance of claims is solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Norman F. Oblon
Attorney of Record
Registration No. 24,618

Stefan U. Koschmieder, Ph.D.
Registration No. 50,238

22850

(703) 413-3000
Fax #: (703)413-2220
NFO/kst

I:\atty\SUKOS\220713us-pr.wpd

Marked-Up Copy
Serial No:

Amendment Filed on:
3-20-2002

IN THE CLAIMS

--3. (Amended) A process as claimed in claim 1 [or 2], wherein at least one electrode is in contact with at least one hydrogenation catalyst, in particular with a noble metal.

7. (Amended) A process as claimed in [any of claims 1 to 6] claim 1, wherein at least one of the electrodes used is a gas diffusion electrode.

8. (Amended) A process as claimed in [any of claims 1 to 6] claim 1, wherein at least one of the electrodes used is a composite comprising at least one conventional electrode material and at least one material for a gas diffusion electrode.

10. (Amended) A process as claimed in [any of claims 3 to 9] claim 3, wherein the at least one electrode which is in contact with a hydrogenation catalyst is used as cathode or as anode or as cathode and anode.

11. (Amended) A process as claimed in [any of claims 1 to 10] claim 1, wherein the alkoxylated furan compound (B) produced in step (i) is reacted in step (ii) to form at least one ring-opened butane derivative.

Claims 13-20 (New).--

THE FOLLOWING IS THE ENGLISH TRANSLATION OF THE ARTICLE 34 AMENDED SHEETS (pages 11 and 12)

as enclosed to IPER/JP

We claim:

1. A process for the electrolytic transformation of at least one furan-based starting compound (A) in an electrolysis circuit which comprises both the steps (i) and (ii):

   (i) electrolytic oxidation of furan or a substituted furan or a mixture of two or more thereof to give

   (a) at least one alkoxylated furan compound (B) which has a C-C double bond in the five-membered heterocyclic ring, and

   (b) hydrogen;

   (ii) hydrogenation of this C-C double bond using the hydrogen obtained in parallel at the cathode in step (i) or hydrogen fed to the electrolysis circuit from outside or by electrocatalytic hydrogenation,

   wherein the process is carried out in an electrolysis cell in which at least one hydrogenation catalyst is present.

2. A process as claimed in claim 1, which proceeds in an undivided electrolysis cell.

3. A process as claimed in claim 1 or 2, wherein at least one electrode is in contact with at least one hydrogenation catalyst, in particular with a noble metal

4. A process as claimed in claim 3, wherein the hydrogenation catalyst, in particular the noble metal, has been applied to a graphite felt.

5. A process as claimed in claim 3, wherein the hydrogenation catalyst has been washed onto the at least one electrode.

6. A process as claimed in claim 3, wherein the hydrogenation catalyst is brought in the form of a suspension into contact with the at least one electrode.

7. A process as claimed in any of claims 1 to 6, wherein at least one of the electrodes used is a gas diffusion electrode.

A process as claimed in any of claims 1 to 6, wherein at least one of the electrodes used is a composite comprising at least one conventional electrode material and at least one material for a gas diffusion electrode.

9. A process as claimed in claim 8, wherein the conventional electrode material comprises carbon.

10. A process as claimed in any of claims 3 to 9, wherein the at least one electrode which is in contact with a hydrogenation catalyst is used as cathode or as anode or as cathode and anode.

11. A process as claimed in any of claims 1 to 10, wherein the alkoxylated furan compound (B) produced in step (i) is reacted in step (ii) to form at least one ring-opened butane derivative.

12. A process as claimed in claim 11, wherein the ring-opened butane derivative is 1,1,4,4-tetramethoxybutane or a substituted 1,1,4,4-tetramethoxybutane.